Serial No. 10/801,517

Response dated Wednesday, March 01, 2006 Reply to Detailed Action of February 6, 2006

## AMENDMENT

## Amendments to the Claims

- (Original) An agent comprising an inner leaflet component and a prosaposin-related polypeptide, wherein said polypeptide has an amino acid sequence selected from the group consisting of:
  - (a) the amino acid sequence set forth in SEQ ID NO: 1;
  - an amino acid sequence having 80% identity to the amino acid sequence set forth in SEQ ID NO:1, wherein said polypeptide retains plasma-membrane affinity;
  - (c) the amino acid sequence set forth in SEO ID NO:2; and
  - an amino acid sequence having 80% identity to the amino acid sequence set forth in SEQ ID NO:2, wherein said polypeptide retains plasma-membrane affinity.
- (Original) The agent of claim 1, wherein said inner leaflet component is phosphatidylserine or a structural analog thereof.
- (Original) The agent of claim 2, wherein said phosphatidylserine or structural analog thereof is dioleoylphosphatidylserine.
- (Original) The agent of claim 1, wherein the molar ratio of said polypeptide to said inner leaflet component is in the range from about 1:1 to about 1:50.
- 5. (Original) The agent of claim 5, wherein the molar ratio of said polypeptide to said inner leaflet component is in the range from about 1:10 about 1:10.
  - 6. (Original) The agent of claim 1 further comprising a pharmaceutically acceptable carrier.
- (Original) The agent of claim 1, wherein said agent promotes cell death in hyperproliferating cells.
- (Original) The agent of claim 7, wherein said hyper-proliferating cells are selected from the group consisting of tumor cells and cancer cells.

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- 9. (currently amended) A method for modulating the distribution of an inner leaflet component in a plasma membrane of a cell of a subject comprising administering to said subject a therapeutically effective amount of the agent of claim 1 an agent comprising an inner leaflet component and a prosaposin related polypeptide, wherein said polypeptide has an amino acid sequence selected from the group consisting of:
  - (a) the amino acid sequence set forth in SEO ID NO: 1:
- (b) an amino acid sequence having 80% identity to the amino acid sequence set forth in SEQ ID NO:1, wherein said polypeptide retains plasma-membrane affinity;
  - (c) the amino acid sequence set forth in SEQ ID NO:2; and
- (d) an amino acid sequence having 80% identity to the amino acid sequence set forth in SEQ ID NO:2, wherein said polypeptide retains plasma membrane affinity.
- (Original) The method of claim 9, wherein said inner leaflet component is phosphatidylserine or a structural analog thereof.
- (Original) The method of claim 10, wherein said phosphatidylserine or structural analog thereof is dioleoylphosphatidylserine.
- (Original) The method of claim 9, wherein the distribution of said inner leaflet component in the outer leaflet of said plasma membrane is altered.
- (Original) The method of claim 12, wherein the concentration of said inner leaflet component in said outer leaflet is increased.
- (Original) The method of claim 9, wherein the distribution of said inner leaflet component is modulated in hyper-proliferating cells.
- 15. (Original) The method of claim 14, wherein said hyper-proliferating cells are selected from the group consisting of tumor cells and cancer cells.
  - 16. (Original) The method of claim 9, wherein said method promotes cell death.
- 17. (currently amended) A method of modulating tumor volume in a subject, said method comprising administering a therapeutically effective amount of the agent of claim 1

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an agent comprising an inner leaflet component and a prosaposin related polypeptide;
wherein said not prompted has an amino acid sequence selected from the group consisting of:

- (a) the amino acid sequence set forth in SEQ ID NO:1;
- (b) an amino acid sequence having 80% identity to the amino acid sequence set forth in SEQ IID NO:1, wherein said polypeptide retains plasma membrane affinity;
  - (c) the amino acid sequence set forth in SEQ ID NO:2; and
- (d) an amino acid sequence having 80% identity to the amino acid sequence set forth in SEQ ID NO-2, wherein said polypeptide retains plasma membrane affinity.
- 18. (Original) The method of claim 17, wherein said agent promotes cell death in hyperproliferating cells.
- (Original) The method of claim 18, wherein said hyper-proliferating cells are selected from the group consisting of tumor cells and cancer cells.
- (Original) The method of claim 19, wherein said cancer cells are selected from the group consisting of sarcoma, neuroblastoma, breast carcinoma, and squamous cell carcinoma cells
- 21. (Original) The method of claim 17, wherein said inner leaflet component is phosphatidylserine or a structural analog thereof.
- 22. (Original) The method of claim 21, wherein said phosphatidylserine or structural analog thereof is dioleoylphosphatidylserine.
  - 23. (Original) The method of claim 17, wherein said subject is a mammal.
  - 24. (Original) The method of claim 23, wherein said mammal is a human.
  - 25. (Original) The method of claim 17, wherein said tumor volume decreases.
- (Original) The method of claim 17, wherein the molar ratio of said polypeptide to said inner leaflet component is in the range from about 1:1 to about 1:50.
  - 27. (Original) The method of claim 26, wherein the molar ratio of said polypeptide to said

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inner leaflet component is in the range from about 1:1 to about 1:10.

- (Original) The method of claim 17, wherein said agent further comprises a pharmaceutically acceptable carrier.
- 29. (currently amended) A method of treating a cancer in a subject, said method comprising administering a therapeutically effective amount of the agent of claim 1 an agent comprising an inner leaflet component and a prosaposin related polypeptide, wherein said polypeptide has an amino acid sequence selected from the group consisting of:
  - (a) the amino acid sequence set forth in SEO ID NO: 1;
- (b) an amino acid sequence having 80% identity to the amino acid sequence set forth in SEQ ID NO:1, wherein said polypeptide retains plasma-membrane affinity;
  - (c) the amino acid sequence set forth in SEQ ID NO:2; and
- (d) an amino acid sequence having 80% identity to the amino acid sequence set forth in SEQ ID NO:2, wherein said polypeptide retains plasma membrane affinity.
- 30. (Original) The method of claim 29, wherein said inner leaflet component is phosphatidylserine or a structural analog thereof.
- (Original) The method of claim 30, wherein said phosphatidylserine or structural analog thereof is dioleoylphosphatidylserine.
- 32. (Original) The method of claim 29, wherein the molar ratio of said polypeptide to said inner leaflet component is in the range from about 1:1 to about 1:50.
- 33. (Original) The agent of claim 32, wherein the molar ratio of said polypeptide to said inner leaflet component is in the range from about 1:10 about 1:10.
- 34. (Original) The method of claim 29, wherein said agent further comprises a pharmaceutically acceptable carrier.
- (Original) The method of claim 29, wherein said agent promotes cell death in hyperproliferating cells.
  - 36. (Original) The method of claim 35, wherein said cell death occurs through apoptosis.

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- 37. (Original) The method of claim 35, wherein said hyper-proliferating cells are selected from the group consisting of cancer cells.
- 38. (Original) The method of claim 37, wherein said cancer cells are selected from the group consisting of sarcoma, neuroblastoma, breast carcinoma, and squamous cell carcinoma cells.
  - 39. (Original) The method of claim 29, wherein said subject is a mammal.
  - 40. (Original) The method of claim 39, wherein said mammal is a human.
- (Original) The method of claim 29, wherein said agent is administered enterally, parenterally, subcutaneously, intravenously, intraperitoneally, or topically.
- (Original) The method of claim 29, wherein multiple doses of said agent are administered to said subject.
- (Original) The method of claim 29, wherein a single dose of said agent is administered to said subject.
- (Original) An anti-tumor agent comprising a polypeptide having the amino acid sequence set forth in SEQ ID NO:2 and dioleoylphosphatidylserine.
- 45. (Original) The anti-tumor agent of claim 44, wherein the mass ratio of polypeptide to dioleoylphosphatidylserine is approximately 5:1.
- 46. (Original) The anti-tumor agent of claim 44, wherein the mass ratio of polypeptide to dioleoylphosphatidylserine is approximately 15:7.
- 47. (Original) The anti-tumor agent of claim 44, wherein the mass ratio of polypeptide to diolecylphosphatidylserine is in the range from about 15:1 to about 3:10.
- 48. (Original) The anti-tumor agent of claim 44, comprising approximately  $10~\mu M$  polypeptide and approximately  $30~\mu M$  dioleoylphosphatidylserine.
- (Original) The anti-tumor agent of claim 44, comprising approximately 10 μM polypeptide and approximately 70 μM dioleoylphosphatidylserine.